

REMARKS

INTRODUCTION

In accordance with the foregoing, claims 1 and 2 have been amended, and claim 5 has been added. Support for the amendment to claim 2 can be found, for example, in FIGS. 6 and 9 of the Application. Support for the amendment to claim 1 can be found, for example, in paragraphs [0027], [0046], [0072] and [0074] of the Application. No new matter is being presented, and approval and entry are respectfully requested.

Claims 1-5 are pending and under consideration. Reconsideration is respectfully requested.

OBJECTION TO THE SPECIFICATION

On page 2, item 2 of the Office Action, the Examiner objected to the abstract because of use of the word "comprising" and because of "means" language. To the extent possible, Applicant has amended the abstract to overcome the Examiner's objection. No new matter has been added. A withdrawal of the objection is respectfully requested.

REJECTION UNDER 35 U.S.C. § 112

In the Office Action, at page 2, numbered paragraph 4, claim 2 was rejected under 35 U.S.C. §112, first paragraph. The Examiner takes the position that the specification does not enable claim 2.

Claim 2 is directed to the exhaust gas purifying equipment for the diesel engine in claim 1, wherein the control means operates the exhaust temperature raising means and at the same time, without executing the post-injection control, controls the switching valve so that the exhaust gas passes through the second continuous regeneration type diesel particulate filter, in the case where the exhaust temperature area of the engine detected by the exhaust temperature area detection means is in the low temperature area, but in the area of which the exhaust temperature is higher than that of the extremely low temperature area.

Applicant respectfully submits that FIG. 6 shows that in the low temperature area Z, the exhaust temperature area can be higher than that of the extremely low temperature area Z2

(step 12 with NO), for example, the exhaust temperature area Z1. Thus, in FIG. 9, step S7 will result in a YES where the temperature is Z1, higher than that of the extremely low temperature area. As shown in FIG. 9, the YES result of step S7 operates the exhaust temperature raising control as detailed in claim 2.

Thus, claim 2 meets the requirements of 35 U.S.C. § 112.

REJECTION UNDER 35 U.S.C. § 103

In the Office Action, at page 3, numbered paragraph(s) 6, claims 1, 3, and 4 were rejected under 35 U.S.C. § 103(a) in view of U.S. Patent No. 4,686,827 (Wade et al.) and U.S. Patent No 6,598,387 (Carberry et al.).

THE PRIOR ART

Wade et al. is directed to a filtration system operative to remove oxidizable particulates from the exhaust gas of a diesel engine. The filtration system includes an ignition means. The ignition means is comprised of a channelized foraminous member (member 17). The member 17 is porous, with channels, by which a catalyst for oxidation is carried. See column 4, lines 49-58. The member 17 is designed to oxidize non-combustion components in exhaust gas passing through this member. See column 5, lines 19-25.

THE CLAIMS PATENTABLY DISTINGUISH OVER THE CITED ART

The Examiner correlates member 17 of Wade et al. to the second continuous regeneration type diesel particulate filter (DPF) of claim 1. However, in contrast to claim 1, member 17 of Wade et al. is not a filter, but an oxidation catalyst. Carberry et al. fails to cure this deficiency of Wade et al.

Moreover, Applicant respectfully submits that none of the cited art references teach or suggest the features of currently amended claim 1.

In summary, it is submitted that neither Wade et al. nor Carberry et al. whether taken alone or in combination teach or suggest the exhaust gas purifying equipment for a diesel engine of claim 1, which includes:

a second continuous regeneration type diesel particulate filter
disposed in the bypass passage;

wherein the second continuous regeneration type DPF has a capacity which is composed smaller than that of the first continuous regeneration type DPF and the second continuous regeneration type DPF is disposed substantially just downstream of the exhaust manifold.

Therefore, it is submitted that claim 1 patentably distinguishes over the cited art.

Claims 2-4 depend from claim 1 and include all the features of that claim plus additional features which are not taught or suggested by the cited art. Therefore, it is submitted that claims 2-4 patentably distinguish over Wade et al. and Carberry et al., whether taken alone or in combination.

NEW CLAIM 5

New claim 5 is directed to an exhaust gas purifying equipment for an engine, which includes:

- a first filter disposed in an exhaust passage of the engine;
- a second filter disposed in a bypass passage upstream of the first filter;
- a detector detecting the exhaust temperature area of the engine;
- a switching valve; and
- a controller controlling an exhaust temperature and the switching valve in correspondence to the exhaust temperature area of the engine detected by the detector,

the controller executing a post-injection, and furthermore controlling the switching valve so that the exhaust gas passes through the second filter, in the case where the exhaust temperature area of the engine detected by the detector is an extremely low temperature area of which the exhaust temperature is lower than that of a predetermined temperature area,

wherein the second filter has a capacity which is smaller than that of the first filter, and the second filter is disposed downstream of the exhaust manifold.

Therefore, it is submitted that claim 5 patentably distinguishes over the prior art.

SUMMARY

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. And further, that all

pending claims patentably distinguish over the prior art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited.

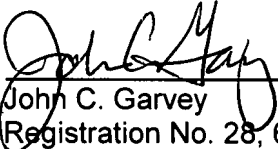
If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such issues.

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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